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| 09/491,032 | 01/25/2000 | Itzhak Gurantz | 2137/104 | 7994 |

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EXAMINER

MILLER, JOHN W

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| ART UNIT | PAPER NUMBER |
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2611

DATE MAILED: 12/05/2001

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/491,032

Applicant(s)

Gurantz

Examiner

John W. Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____

2a) ☐ This action is **FINAL**.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-54 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) 1-6 and 22-27 is/are allowed.

6) ☒ Claim(s) 7-21 and 28-54 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

20) ☐ Other: _____

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Reissue Applications

1. The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414.

The reissue oath/declaration filed with this application is further defective (see 37 CFR 1.175 and MPEP § 1414) because the inventor failed to date the declaration at the time of signing.

2. Claims 1-54 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

3. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claim 50 is rejected under 35 U.S.C. 102(e) as being anticipated by Hylton et al (5,708,961), newly cited.

As to claim 50, note the Hylton et al reference, Figure 7 and col. 29, lines 5+, which disclose a shared processing system 10₁ used in conjunction with the hybrid fiber-coax network of Figure 6. The claimed digital video conversion system is met by the shared processing system 10₁ as follows: the claimed chassis is met by the housing inherent to the shared processing system 10₁, the claimed plurality of converter chains is met by the CATV RF tuner-digital receiver pairs of the channel selectors 11 which perform tuning and demodulating functions, respectively, the claimed 'at least one' conditional access unit is met the decryption modules 11₃₁₋₃₄ which are connected to the tuner-receiver pairs and which serve to decrypt respective digital demodulated signals in accordance with decryption keys sent from the controller 19, and the claimed at least one remote control receiver unit is met by the transceiver 21 which is responsive to commands from the controller 19 which likewise controls the bank of channel selectors.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 9-11, 13-15, 17-19, 21-23, 25, 26, 28, 30-32, 34-36, 38-40, 42-44, 46-49, 51, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al (5,426,701), newly cited.

As to claim 7, note the Hylton et al reference, Figure 7 and col. 29, lines 5+, which disclose a shared processing system 10₁ used in conjunction with the hybrid fiber-coax network of Figure 6. The claimed digital video conversion system is met by the shared processing system 10₁ as follows: the claimed splitter is met by the splitter inherent to the divided input signal path shown at the leftmost portion of the figure, the claimed plurality of converter chains is met by the CATV RF tuner-digital receiver pairs of the channel selectors 11 which perform tuning and demodulating functions, respectively, the claimed single conditional access unit is met, in part, by the decryption modules 11₃₁₋₃₄ which are connected to the tuner-receiver pairs and which serve to decrypt respective digital demodulated signals in accordance with keys sent from the controller 19, and the claimed at least one remote control receiver unit is met by the combination of the controller 19 and the transceiver 21 which are collectively responsive to individual remote controls associated with individual set-top terminals 100, col. 30, line 47, to col. 31, line 15. The reference differs from that claimed in that the shared processing system 10₁ does not have a single conditional access unit, but rather a plurality of decryption modules which perform decryption on a per-channel basis. However, this is not considered to be a patentable distinction. It is submitted that it would have clearly obvious to one of ordinary skill in the art at the time of the invention to

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simplify the decryption process by using a single decryption algorithm/key for a savings in cost and complexity.

Claim 9 is met by that discussed above.

As to claim 10, the Hylton et al reference discloses that decompression takes place in the set-top terminals 100 (particularly at the decoders 129 and 131) as opposed taking place at the shared processing system 10₁. However, given that the shared processing system 10₁ serves to bundle processing for plural set-top terminals at a central distribution point, this is not considered to be a patentable distinction. Accordingly, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time the invention was made to include decompression circuitry in the shared processing system 10₁ in order to facilitate the use of less complex and less costly analog set-top terminals.

Claims 11, 13, and 14 are met by that discussed above.

As to claim 15, the reference discloses that the system 10 may be connected to a number of different digital broadband networks 5, including wireless digital broadcast networks, col. 5, lines 12-15. And so, while the system 10₁ is disclosed for connection to a hybrid fiber-coax system, it is submitted that implementing the system 10₁ in a satellite broadband network, using well-established L-band frequency division multiplexed digitally modulated channels, as claimed, is without patentable distinction. Accordingly, it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to do so in order to provide digital television to neighborhoods not equipped for wired distribution.

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Claims 17-19, 21-23, 25, 26, 28, 30-32, 34-36, 38-40, 42, and 43 are met by that discussed above.

As to claim 44, the plurality of outputs are met by either the outputs of the decryption modules 11₃₁₋₃₄ or of the program selectors 13.

Claims 46-49, 51, and 53 are met by that discussed above.

8. Claims 8, 16, 24, 29, 37, 45, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al (5,708,961), newly cited, in view of Herrmann et al (5,426,701), previously cited.

As to claim 8, the Hylton et al reference discloses that the decryption modules 11₃₁₋₃₄ could include an interface to a renewable security device, yet is silent as to the particular type, col. 29, lines 48-58. Now note the Herrmann et al reference which teaches a smart card as a renewable security device which advantageously renders its converter inoperable when removed, thus discouraging tampering. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify the Hylton et al system with simpler smart card decryption scheme as a cost effective alternative renewable security device not requiring the signaling of decryption information via the QPSK modem 25.

Claims 16, 24, 29, 37, 45, and 52 are met by that discussed above.

9. Claims 12, 20, 27, 33, 41, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al (5,708,961) in view of Hoarty et al (5,550,578), both newly cited.

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As to claim 12, although the channel selectors 11 (incorporating tuner, digital receiver, and decryption circuitry) are described as 'banks of channel selectors', the reference is silent as to the whether or not they are individual pluggable, modular units. However, note the Hoarty et al reference, Figures 11 and 12, which discloses for an interactive television information system the structure of a chassis for holding multimedia controllers (MMCs) and modulator cards. Particularly, rows of cards 114 are supported on a chassis 113, mounted within the rack 112. Here, the cards 114 are insertable or pluggable into the chassis 113. Furthermore, Figure 12 shows a scrambler-modulator card 126, a multipurpose card. Accordingly, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the banks of channel selectors 11 with such insertable or pluggable single or multipurpose cards for the ease with which such modularity enables one to expand, upgrade, and make repairs.

Allowable Subject Matter

10. Claims 1-6 and 22-27 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest a plurality of converter chains, at least one conditional access unit, and at least one remote control receiver unit *housed within a chassis* and having *a plurality of outputs*. The Hylton et al reference discloses a shared processing system for facilitating wireless on-premises video distribution. It would not have been obvious to one of ordinary skill

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in the art to modify the shared processing system 10 with plural outputs having separate transmitters for each set-top terminal because of the expense and complexity of such a system, col. 2, lines 40-46. Further, it would not have been obvious to modify the Hylton et al system with plural wired transmission paths because such a modification contradicts the problem which was identified and solved by the Hylton et al system, namely: to be able to add or move receivers in a customer premises without having to install new cabling or wiring together with new connectors and/or interface devices at new terminal locations, col. 1, lines 36-54. In sum, the Hylton et al system teaches away from a wired modification.

Conclusion

12. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

on _____.
(Date)

Typed or printed name of person signing this certificate:

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Signature: _____

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703) _____ - _____ on _____.
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

13. Any response to this action should be:

(a) mailed to: Commissioner of Patents and Trademarks

Washington, D.C. 20231

(b) or faxed to: (703) 872-9314 for either formal communications intended for entry, or informal or draft communications (please label "PROPOSED" or "DRAFT")

(c) or hand-delivered to: Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor
(Receptionist).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John W. Miller whose telephone number is (703) 305-4795. The examiner can normally be reached on Monday through Friday from 8:30 AM to 6:00 PM.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached at (703) 305-4380. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

John W. Miller

December 2, 2001


John W. Miller
Primary Examiner
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